# UNITED STATES PATENT AND TRADEMARK OFFICE

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| 09/872,596 | 06/01/2001 | Dennis P.J. Ting | 3179.1001-001 | 2621 |

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| EXAMINER |
|---|
| WONG, BLANCHE |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2667 | |

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET·TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 April 2005*.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-34* is/are pending in the application.

　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 August 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　a)☐ All　b)☐ Some *　c)☐ None of:

　　1.☐ Certified copies of the priority documents have been received.

　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

### *Drawings*

1.    New corrected drawings in compliance with 37 CFR 1.121(d) are required in this

application because hand-written marks should be removed.

### *Specification*

2.    The disclosure is objected to because of the following informalities: On. p. 5, ln.

16, Examiner suggests replacing "26-N" with – 126-N --.

Appropriate correction is required.

### *Claim Objections*

3.    Claim 22 is objected to because of the following informalities:  Examiner

suggests replacing "the configuration routine" in ln. 1-2 with – the trunk configuration

routine – for consistency with cl. 14, ln. 4, of which cl. 22 is a dependent.  Appropriate

correction is required.

### *Claim Rejections - 35 USC § 112*

4.    The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

5.    **Claims 1,3,4,8,11,12,14,22,23,24,26,27,34** are rejected under 35 U.S.C. 112,

second paragraph, as being indefinite for failing to particularly point out and distinctly

claim the subject matter which applicant regards as the invention.

With regard to cl. 1, ln. 2, "the trunk including a plurality of communication ports"

cannot comprise steps.  Only a method comprises steps.

With regard to cl. 1, ln. 3, it is unclear whether "the plurality of communications

ports coupled to a switch", is the same as "a plurality of communications ports" in ln. 2.

If this is the case, Examiner suggests replacing "a plurality of communications ports" in ln. 2 with -- a plurality of communications ports coupled to a switch – to be consistent with ln. 3.

With regard to cl. 1, ln. 3-4, it is unclear whether ownership is assigned "to a switch" or "to a virtual network device".

With regard to cl. 3, the same rejections for cl. 1 applies to cl. 3.

With regard to cl. 4, ln. 4, it is unclear whether "receiving the data packet" is trying to distinguish from the device structure allocated to the communications port that is *not* receiving the data packet [with emphasis], or something else. It seems in cl. 6, ln. 2, there is also a plurality of communication ports for transmitting the data packet.

With regard to cl. 4, ln. 5, it is unclear whether the pointer stored in the owner field is pointed to the virtual network device, or pointed to a virtual device structure allocated for the virtual network device, as recited in cl. 3, ln. 16-17.

With regard to cl. 8, the same rejections for cl. 1 applies to cl. 8.

With regard to cl. 12, ln. 6-7, it is unclear where a virtual network address is assigned to the virtual network address to the trunk network address.

With regard to cl. 12, ln. 8, it is unclear whether a virtual device is the same as a virtual device in ln. 3.

With regard to cl. 12, ln. 9-10, it is unclear whether an owner routine selects for a data·packet or for the trunk network address received by any of the communications ports in the trunk.

With regard to cl. 14, the same rejections for cl. 12 applies to cl. 14.

With regard to cl. 14, it is unclear whether the device structure allocated for the plurality of communications ports in ln. 14-15, is the same as the device structure allocated for the virtual network device in ln. 13-14.

With regard to cl. 22, ln. 6-8, it is unclear where a virtual network address is assigned to the virtual network address to the failsafe network device address.

With regard to cl. 23, ln. 9-10, it is unclear where a virtual network address is assigned to the virtual network address to the trunk network address.

With regard to cl. 24, ln. 6-8, it is unclear where a virtual network address is assigned to the virtual network address to the trunk network address.

With regard to cl. 24, ln. 9-10, it is unclear whether the means for forwarding is forwarding the data packet, or a received data packet for the trunk network address. Additionally, it is unclear whether the means for forwarding is by any of the communications ports in the trunk and whether the means for forwarding is to the forward to the virtual network device.

With regard to cl. 26, the same rejections for cl. 24 applies to cl. 26.

With regard to cl. 27, ln. 5-6, it is unclear whether the pointer stored in the owner field is pointed to the virtual device, or pointed to a device structure allocated for the virtual network device, as recited in cl. 26, ln. 16-17.

With regard to cl. 34, ln. 10-11, it is unclear where a virtual network address is assigned to the virtual network address to the failsafe network device address.

6.      There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the third network address" in ln.7-8.

Claim 14 recites the limitation "the virtual network device" in ln. 13.

Claim 14 recites the limitation "the device structure allocated for the virtual network device" in ln. 13-14.

Claim 14 recites the limitation "the owner field" in ln. 14.

Claim 14 recites the limitation "the device structure allocated for the plurality of communications ports" in ln. 14-15.

Claim 22 recites the limitation "the third network address" in ln. 6.

Claim 22 recites the limitation "the virtual network address to the failsafe network device address" in ln. 7-8.

Claim 22 recites the limitation "the third virtual network device" in ln. 8.

Claim 23 recites the limitation "the virtual network address to the trunk network address" in ln. 9-10.

Claim 24 recites the limitation "the virtual network address to the trunk network address" in ln. 7-8.

Claim 26 recites the limitation "the device structure allocated for the plurality of communications ports" in ln. 17-18.

Claim 34 recites the limitation "the means for assigning" in ln. 6.

Claim 34 recites the limitation "the third network address" in ln. 10.

Claim 34 recites the limitation "the virtual network address to the failsafe network device address" in ln. 10-11.

7.      **Claims 1,3,8** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections.  See MPEP § 2172.01.  The omitted structural cooperative relationships are:

With regard to cl. 1, it is unclear whether a first network address assigned to a

first communications port in cl. 1, In. 5-6, is one of the network addresses for the

plurality of communications ports in cl. 1, In. 7. A trunk network address is set to a first

network address assigned to a first communications ports, in cl. 1, In. 5-6, and network

addresses and a virtual network address are set to the trunk network address, in cl. 1,

In. 7-9. The same holds for cl. 3 and 8.

### *Allowable Subject Matter*

8.      Claims 2,5-7,9,10,13,15-21,25,28-33 would be allowable if rewritten to overcome

the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and

to include all of the limitations of the base claim and any intervening claims.

### *Response to Arguments*

9.      Applicant's arguments filed April 28, 2005 have been fully considered but they

are not persuasive.

With regard to cl. 1, 35 U.S.C. 112 rejection, Applicant contends that "in the

specification, a virtual device driver 150 is created for physical trunks 124 by allocating

a virtual NIC device structure. ... " Remarks, p. 12-13. The problem was not whether a

virtual device driver allocates a virtual device structure. Cl. 1 recited " ... a virtual

network address assigned to the virtual network address to the trunk network address

... " in In. 7-8. The problem was a virtual network address was assigned to another

virtual network address which belong to a trunk network address. The amended cl. 1

recites "... a virtual network address assigned to the virtual network device to the trunk

network address ..." in In. 7-8, and effectively corrects the problem in the claim

language. The amended claim is read as 1.) setting network address *for* the plurality of

communication ports, and 2.) setting a virtual network address assigned to the virtual

network device in ln. 4 *to* the trunk network address [with emphasis].

With regard to cl. 1 and 3, 35 U.S.C. 112 rejections, other problems arose when

the claims were amended.  Applicant should ascertain that network addresses,

including a first, a second, a third network address, that belong with network devices,

and virtual network addresses that belong with virtual network devices, and keep

distinct these network addresses with the trunk network address, to avoid any

antecedent basis problem.  Similar problem can be found with device structures that

belong with a plurality of communications ports, and a virtual device structure that

belongs with the virtual network device.


10.     Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Blanche Wong whose telephone number is 571-272-
3177.  The examiner can normally be reached on Monday through Friday, 830am to
530pm.
        If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Chi H. Pham can be reached on 571-272-3179.  The fax phone number for
the organization where this application or proceeding is assigned is 571-273-8300.
        Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system.  Status information for
published applications may be obtained from either Private PAIR or Public PAIR.
Status information for unpublished applications is available through Private PAIR only.
For more information about the PAIR system, see http://pair-direct.uspto.gov. Should
you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

*Bw*

BW
September 2, 2005

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